Appl. No. 10/722,292 Amendment dated July 14, 2006 Reply to Office Action of June 14, 2006

This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims:**

1-49. (cancelled)

- 50. (new) A method of identifying a molecule that specifically binds to a ligand selected from the group consisting of a protein, a fragment of the protein comprising a domain of the protein and a nucleic acid encoding the protein or fragment selected from the group consisting of CH-1, CH-2, CH-3, CH-4, CH-5, CH-6, CH-7, CH-8 and CH-9 comprising
- a) contacting said ligand with a plurality of molecules under conditions conducive to binding between said ligand and said molecules; and
  - b) identifying a molecule within said plurality that specifically binds to said ligand.
- 51. (new) A method of identifying a candidate agent that inhibits CHAG gene expression comprising contacting a nucleic acid selected from the group consisting of a CHAG polynucleotide sequence comprising SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8 or SEQ ID NO:9 with a candidate agent and determining whether the candidate agent inhibits expression of the CHAG polynucleotide.
- 52. (new) The method of claim 51, wherein the candidate agent is an antisense nucleic acid.
- 53. (new) The method of claim 52, wherein that antisense nucleic acid is selected from the group consisting of a catalytic RNA, a ribozyme, an antisense RNA, and a chimeric RNA-DNA analogue.

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54. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:1.

55. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:2.

56. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:3.

57. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:4.

58. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:5.

59. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:6.

60. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:7.

61. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:8.

62. (new) The method of claim 51, wherein the nucleic acid comprises a CHAG polynucleotide comprising SEQ ID NO:9.

63. (new) The method of claim 51, wherein determining whether the candidate agent inhibits expression of the CHAG polynucleotide comprises detecting expression of the CHAG

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polynucleotide using PCR, northern or southern blot in the presence or absence of the candidate compound.

- 64. (new) The method of claim 51, wherein the nucleic acid is present in a cell and the cell is contacted with the candidate agent.
- 65. (new) The method of claim 64, wherein the cell is selected from the group consisting of cultured myocytes, isolated papillary muscles, skinned fibers, and beating or arrested isolated perfused heart tissue subjected to pressure and volume-loading conditions.
  - 66. (new) The method of claim 65, wherein the cell is a cultured myocyte.